ICS 208 – BP Incident Management Plan – Site Safety and Health Plan for "Oil Spill Response"

1. Project Objective

Prepared by:	Dave Piotrowski	**Date:**	6/11/10 – Day 52
Overall Objective of Project:	Oil response activities		

1. On-water containment and recovery of crude oil from "Deepwater Horizon" well blowout / fire event utilizing oil spill response vessels.
2. Decontamination operations for containment and recovery activities
3. Shoreline clean-up operations to address potential impacts
4. In-situ burn operation

2. Site Description at Time of Incident

Date:	4/20/10	**Sector:**	GoM
Business Unit:	GoM Exploration		
Name of Facility:	Transocean Deepwater Horizon (drilling rig)		
Location (Road, City):	Gulf of Mexico, MC252 No. 1 (Macondo Well) Lat 28°44' 12"N, Long 88°23'14"W		

Potential Hazards (Y, N):				
	N	Excavations, Trenches, and/or Confined Spaces		
Y		Hazardous Vapors and Gases		Oil, fire, smoke
Y		Direct Exposure to Hazardous Material		Oil, fire, sea
Y		Dust and Particulates/Respiratory Concerns		Oil
	N	Temperature Extremes		
Y		Equipment Hazards		Boats, helicopters, personnel lifts, ROVs
	N	Other:	Potential H2S exposure from unknown reservoir	Well H2S absent

Area Affected: (Describe the area including approximate dimensions. Attached Site Map)

Crude oil spill from well MC252 #1.

Surrounding Population (Y/N):			
Y		GoM waters	
	N	Suburban	
	N	Rural	

Distance to Nearest Population:

BP Nakika = 10 nautical miles, Shoreline = 47.6 statute miles

Topography: (Describe terrain)

See site specific details on Site HSSE Plans

Climate/Weather Conditions:		
	Present	Anticipated
Winds	SE 7-10	SE 6-9
Temp. (F)	79	77 degrees F
Humidity		84%
% Rain	5	15%

6035574

Seas	1 ft Smooth	1 feet Smooth
Comments		

3. Background Information

Background information: (Include date, range of site use, source of contamination, estimated extent of contamination, known and suspected contaminants, etc.)

A 4/20/2010 well blow out and fire on Deepwater Horizon causing oil sheen on surface of GoM waters.

4. Entry Objectives

Entry Objectives: (Fully describe the purpose of site visit(s). If multiple visits, indicate the objectives of each entry. The number and types of samples should be included if sampling is to be performed).

The overall objective is to utilize the ICS 208 BP Incident Management Plan - Site Safety and Health Plan. The project-specific response activities (listed below) and objectives will be conducted in accordance with Site-Specific Safety Plans. The safety plans specifically covering these response activities provide more detail on items such as control boundaries, safety procedures, communications, monitoring, potential exposure/mitigation, and emergency procedures. There are three general activities/operations covered by these safety plans:

1. On-water oil recovery
2. Decontamination
3. Shoreline recovery operations
4. In-situ burn operation

The following site-specific safety plans listed below will be utilized to address site-specific hazards of the operations. The site-specific safety plans are intended to reduce confusion during field operations. The overall strategy of this structure is three-tiered: Tier 1 is the overall BP Incident Management Plan, Tier 2 is comprised of operation-specific safety plans; Tier 3 plans are conducted in the field and serve as site Job Safety Environmental Analysis (JSEA). Three general activities/operations and corresponding site safety documents:

1. Safety and Health Plans (**on-water operations**):

Oil spill containment and on-water recovery efforts to be conducted by MSRC and NRC oil spill response vessels / barges. On-water oil recovery vessel activities to be coordinated by O'Brien's Oil Pollution Services. The site-specific safety documents for the on-water oil recovery operations are listed below:

- MSRC Dispersant Group Site Safety Plan for Dispersant Staging Airport Operations
- MSRC Response Site Safety Plan (SSP)
- Site Safety Plan for Dispersant Operations (NRC Plan) *Note: page header reads-O'Brien's Response Management*
- NRC Site Safety Plan (vessels)
- MC 252 Air Monitoring Plan (BP)
- ICS – 208 Boating Safety
- ICS – 208 Severe Weather Alert

2. Safety and Health Plans (**decontamination operations**):

The contractors completing the decontamination activities and associated tasks will be Oil Mop, Inc. Decontamination activities to be coordinated by O'Brien's Oil Pollution Services. The site-specific safety documents for the decontamination operations are listed below:

- Mississippi Canyon 252 Vessel Evaluation and Decontamination Plan

3. Safety and Health Plans (**shoreline recovery operations**):

Each individual shoreline clean-up operation, if deemed necessary, will be supervised by MSRC. Shoreline operations to be coordinated by O'Brien's Oil Pollution Services. The site-specific safety documents for the shoreline operations are listed below:

- MSRC Response Site Safety Plan (SSP) Shoreline Cleanup
- ICS 208 - MSRC Site Safety and Health Plan
- MSRC Specific Site Safety Plan
- ICS 208 – Ralston Shoreline Containment Protection Structures (SSP)
- Tri-State Bird Rescue & Research, Inc. Site Specific Safety and Health Plan (SSSHP)

4. Safety and Health Plan **(in-situ burn operation):**

The in-situ burn operation will be managed by O'Brien's Oil Pollution Services from a MSRC vessel. The site-specific

5. Personnel Roles

BP Personnel:	

Key Personnel	Title / Responsibilities
Capt Bill Drelling	FOSC – Federal On Scene Commander
Scott Schaeffer	DOSC – Deputy Operations Section Chief (BP)
Phillip Woods	SOSC – State On Scene Coordinator - Alabama
Richard Harrell	SOSC – State On Scene Coordinator - Mississippi
Doug White	SOSC – State On Scene Coordinator - Florida
Don Piotrowski (Days) / Pam Tomme (Nights)	BP IMT Safety Officer (source operations)
Don Pratt	BP IMT Health and Safety Unit Leader (source operations)
Roddy Randham	BP IMT Health and Safety Unit Leader (source operations)

Contract Personnel	

Note: See Appendix A, Incident Management Team (IMT) / Tactical Response Team (TRT) Organization.

Federal Agency Representatives:		
Name	Agency	Phone
Capt. Bill Drelling	USCG	
Dean Eulock	EPA	
Clay Jordan	DOI	

State Agency Representatives:		
Name	Agency	Phone
See Section Chart		

Local Agency Representatives:		
Name	Agency	Phone
See Section Chart		

6. Site Security And Control

Security Team Leader:			
BP:	Neil Cox	Phone:	
Contractor:		Phone:	

Control Boundaries:	
Map:	Sketch attached (Y/N):
Site: MC252	Secured (Y/N):

A Safe perimeter has been established as:

Surrounding waters to Horizon rig being controlled by dedicated M/V (USCG)

Note: See attached Site Map.

Spill Containment Procedures:

See MSRC and NRC Site Safety Plans listed in Section 4 above.

NOTE: Reference the Action Procedure of the site Incident Management Plan (IMP)

7. Hazard Evaluation

The following substance(s) are known to be on site. The primary hazards of each are identified.

Product	Physical State[1]	Waste Characteristics[2]	Primary Hazard[3]
			Inhalation
Natural gas	Gas vapor	Flammable	Inhalation
BP Crude Oil.pdf (124 KB) MSDS adendum0001 Adobe Acrobat Document 574 KB	condensate.pdf (443 KB)	natural gas.pdf (100 KB)	

[1] – Liquid, solid, sludge, gas/vapor, other.

[2] – Corrosive, flammable, toxic, volatile, reactive, radioactive, carcinogen, other.

[3] – Toxic on inhalation or ingestion, absorbed through skin, irritant to eyes, irritant to respiratory tract, irritant to skin, other.

NOTE: See Appendix C for Material Safety Data Sheets (MSDS's)

Anticipated concentration and allowable exposure limits

Product	Anticipated Concentration	Full-Shift Exposure Limit	Short-Term Exposure Limit

NOTE: Include institution that establishes limit (e.g., OSHA, ACGIH, etc.).

Other Site Hazards (Y, N):		**Hazards below are potentially present in current operations**	
Y		Heat	In-Situ Burning
	N	Cold	
Y		Confined Spaces	Decon
Y		Heavy Equipment	Boats/vessels/helicopter/cranes/ fork lifts
	N	Bloodborne Pathogens	
Y		Poison Ivy	
Y		Insects:	
	N	Rodents:	
Y		Snakes:	
		Other:	
		Other:	
		Other:	

8. Personal Protective Equipment

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas and tasks. See Health Hazard Information section on MSDS of product in Appendix C.

Location	Job Function	Level of Protection
On-water oil recovery vessels	Oil skimming	Refer to site-safety plans for these activities (Section 4)
Decontamination facilities	Equip. decon	Refer to site-safety plans for these activities (Section 4)
Shoreline operations	Land cleanup	Refer to site-safety plans for these activities (Section 4)
On Water In-Situ Burning	In-Situ Burning	Refer to site-safety plans for these activities (Section 4)

NOTE: Air monitoring equipment will be used to determine the need for Level C & higher protection.

PPE – Levels of protection:

Level A: To be selected when the greatest level of skin, respiratory and eye protection is required.

Level B: The highest level of respiratory protection is necessary but a lesser level of skin protection is needed.

Level C: The concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air purifying respirators are met.

Level D: A work uniform affording minimal protection, used for nuisance contamination only.

NOTE: See 29 CFR 1910.120 Appendix B for more detailed information in regard to levels of protection.

Specific protective equipment for each level of protection is as follows:

Refer to the documents listed in Section 4 for more information on specific equipment and level of protection.

NOTE: No changes to the specified levels of protection shall be made without the approval of the On-Scene Commander and Site Safety Officer.

Identify PPE Equipment Supply Source

Required PPE, safety equipment, and air monitoring equipment to be supplied MSRC, NRC, and/or contractors (and/or subcontractors) completing work on the achievement of the objectives stated in Section 1.

9. Environmental Monitoring

A direct reading instrument will be used to monitor LEL of flammable gasses. The instrument will be on while the workers approach the work area, and readings will be taken during the following conditions:

- **Possibility of IDLH or flammable atmosphere has developed.**
- **Indication that exposures may have risen over limits since prior monitoring.**
- **Work begins on different portion of site.**
- **Different type of operation is initiated.**
- **Employees are working in areas with obvious liquid contamination.**

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Combustible Gas Monitoring will be conducted by:	Refer to site-safety plans for these activities (Section 4)
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	

Benzene/Xylene/Toluene monitoring will be conducted by:	Refer to site-safety plans for these activities (Section 4)
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	

Other monitoring will be conducted by:	Refer to site-safety plans for these activities (Section 4)
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	

NOTE: Monitoring results are attached to this report.

Identify Monitor Equipment Supply Source

Standard equipment provided by MSRC and NRC.

10. On-Site Work Plans

Tactical responders will perform the following tasks:

1. On-water oil recovery
2. Decontamination
3. Shoreline recovery operations
4. In-Situ Burning

11. Special Instructions

Communicate with Site Safety Officer about any hazards observed not listed in Site Safety Plan.

12. Communication Procedures

The following emergency signal indicates that there is an emergency situation:

	Vessel general alarm (primary)		

In addition, the following standard hand signals will be used in case of failure of audible communications:

- **Hand gripping throat** ⇒ **Out of air, can't breath**
- **Grip partner's wrist or both** ⇒ **Leave area immediately hands around waist**
- **Hands on top of head** ⇒ **Need assistance**
- **Thumbs up** ⇒ **OK, I understand**
- **Thumbs down** ⇒ **No, negative**

13. Decontamination Procedures

Personnel and equipment leaving the work area shall be thoroughly decontaminated. Soiled boots and clothing will be removed before entering transport vehicle. Disposable items (e.g. gloves, rags) will be disposed of on-site in a manner consistent with facility operatives. Refer to MSCR Specific Procedures.

If non-disposable items will be used on-site, then describe decontamination procedure:

14. Emergency Procedures

The following standard emergency procedures will be used by on-site personnel. The Site Safety Officer shall be notified of any on-site emergencies and will be responsible for ensuring that the appropriate procedures are followed:

Personnel injury – Upon notification of an injury, the On-Scene Commander and Site Safety Officer will assess the nature of the injury. If the cause of the injury or absence of the injured person does not affect the performance of site personnel, operations may continue, with the On-Scene Commander and Site Safety Officer initiating the appropriate first aid and necessary follow-up as stated above. If the injury increases the risk to others, all site personnel shall be assembled in a given area for further instructions. Activities on site will stop until the added risk is removed or minimized.

Fire/Explosion – Upon notification of a fire or explosion on site, all site personnel will be assembled at the decontamination line. The fire team shall be alerted, and all personnel moved to a safe distance from the involved area.

Personal Protective Equipment Failure – If any worker experiences a failure or alteration of protective equipment that affects the protection factor that person and his/her buddy shall immediately leave the affected area. Reentry shall not be permitted until the equipment has been repaired or replaced.

Other Equipment Failure – If any other equipment on site fails to operate properly, the On-Scene Commander and Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the Incident Action Plan (IAP) tasks, all personnel shall leave the area until the situation is evaluated and appropriate actions taken.

In All Situations, When an On-Site Emergency Results in Evacuation of the Work Area, Personnel Shall Not Re-Enter Until:

1. **The conditions resulting in the emergency have been corrected.**
2. **The hazards have been reassessed.**
3. **The Site Safety Plan has been reviewed.**
4. **Site personnel have been briefed on any change in the Site Safety Plan.**

Location of the Emergency Exit Route (See Site Map):

Follow Vessel Emergency Procedures

Location of Designated Assembly Area (See Site map):

Follow Vessel Emergency Procedures

15. Site Safety Plan

Site Safety Officer(s):	Don Johnson / Tony Repka

The Site Safety Officer is directly responsible for safety recommendations on site. He/she will maintain daily site logs documenting all notable events and/or conditions of health and safety concerns.

Emergency Medical Care:	**See ICS 206 - Medical Plan**

	Qualified Medical personnel are located on site (Y/N): Y		
	If there are qualified Medical personnel located on-site, then identify location (See Site Map):		
	Phone Number:		
	Radio Frequency:		

Medical Surveillance:

In accordance with 29 CFR 1910.120 (f), the employee/contractors involved in this project have been examined by a physician trained in occupational medicine, for the purpose of determining fitness with respect to handling hazardous materials and wearing personal protective equipment. The results of the examination indicate that these employees/contractors are physically capable and qualified to work under conditions described in this plan, without risk to personal health and safety.

Emergency Resources:

Incident Post Phone Number:		

NOTE: Telephone communication to the Command Post should be established as soon as practical.

Site Resources:

		Y/N	Comments
	Telephone	Y	Satellite/Cell phone
	Radio	Y	VHF
	Electricity	Y	
	Illumination	Y	
	Sanitation	Y	
	Water Supply	Y	
	Designated First Aid/CPR On-Site Provider	Y	
	Other:		
	Other:		

	Local Resources:	
		Phone Number
	Ambulance	
	Hospital Emergency Room	
	Sheriff	
	Police	
	State Police	
	Fire Department	
	Airport/Helicopter	
	EPA Contact	
	USCG	
	MMS Pipelines	
	NRC	
	MMS New Orleans	504-736-2504

NOTE: See Appendix B, Emergency Care and Movement of Injured Personnel.

Emergency Medical Information For Substances Present:

	Substance	Exposure Symptoms	First-Aid

	See MSDS attached above		
	NOTE: See Appendix C, MSDS's for product. Section, Health Hazard Information		

16. Training Certification

The Site Safety Officer will ensure that all employees have the appropriate training/certification as per 29 CFR 1910.120.

HSE Orientation & Training Requirements

Training Hotline: 1-866-647-2338

Register for training by e-mail at horizonresponse@pecpremier.com

Audience and Work Scope	Purpose	Course Info.	Pre-requisites
Volunteers - Non-contaminated beach cleanup Pre-cleaning of beaches – pick up trash and debris	Ensure anyone working under BP coordination has an understanding of BP HSE expectations. This training is being delivered at worksites prior to volunteers being deployed.	**Module 1 - BP HSE Basic Orientation** Instructor led (Approx. 30-45 min.)	None
Contractors - Conducting work on behalf of BP in the field Any labor/work not involving spill contaminated materials	Provides BP contractors with a basic HSE Safety Orientation and expectations of contractors. This builds on Module 1 with a focus on pre-job safety meetings, job planning, risk identification, and the right to 'stop the job' if things appear unsafe.	**Module 2 – Contractor Expectations (Includes Module 1)** Instructor led (Approx. 1.5 hours)	None
Contractors - Post Emergency Conducting work on behalf of BP cleaning up spill contaminated shoreline and vessel operations during "weathered" oil recovery.	Prepare individuals for the hazards in the contaminated shoreline environment. This is a 4 hour course that meets the recommendations of OSHA CPL 2-2.5.1 for Oil Spill Response-Single Event	**Module 3 - Post-Emergency Spilled Oil Cleanup (Includes materials from Modules 1 & 2)** Instructor led – 4 Hours	Each work team will have at least one 40-hour supervisor on site or on each vessel to oversee operations.
Contract Supervision of those who will have direct contact with petroleum for shoreline and vessel operations **Direction and management of workers** performing spill related cleanup activities	Provides BP contractors with a basic HSE Safety Orientation and expectations of contractors. This builds on Module 1 with a focus on pre-job safety meetings, job planning, risk identification, and the right to 'stop the job' if things appear unsafe.	**Module 2 – Contractor Expectations (Includes Module 1)** Instructor led (Approx. 1.5 hours)	40 hour HAZWOPER (Instructor led and hands-on). Contract supervision must certify to BP that 40 hour training is current prior to work beginning. NOT AVAILABLE THROUGH BP

May 21, 2010

NOTE: See the site Incident Management Plan (IMP) for BP employee training roster.